

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (withdrawn) A method for producing a light emitting diode, which has a plated substrate with a mirror, comprising steps of:

- a) providing a substrate with an LED epitaxial structure including a second cladding layer, an active layer, a first cladding layer, a window and a metal contact layer sequentially formed on said substrate;
- b) etching a part of said LED epitaxial structure to expose said second cladding layer;
- c) forming a first electrode and a second electrode respectively on said metal contact layer and said exposed second cladding layer, and heating both said electrodes by rapid thermal annealing;
- d) bonding a temporary substrate to said LED epitaxial structure and said first electrode;
- e) removing said substrate provided in step a);
- f) forming a mirror beneath said LED epitaxial structure;
- g) plating a permanent substrate beneath said mirror; and
- h) removing said temporary substrate.

Claim 2 (withdrawn): The method as claimed in claim 1, wherein said substrate provided in step a) is a GaAs substrate, a sapphire substrate or an InP substrate.

Claim 3 (withdrawn): The method as claimed in claim 1, wherein said LED epitaxial structure is made from a material selected from the group consisting of  $\text{Ga}_x\text{Al}_y\text{In}_{1-x-y}\text{N}$ ,  $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ ,  $\text{In}_x\text{Ga}_{1-x}\text{As}$ ,  $\text{ZnS}_x\text{Se}_{1-x}$ ; wherein  $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ .

Claim 4 (withdrawn): The method as claimed in claim 1, wherein said metal contact layer is partially etched to retain a portion beneath said first electrode.

Claim 5 (withdrawn): The method as claimed in claim 1 further depositing a transparent conductive film between said first electrode and said metal contact layer.

Claim 6 (withdrawn): The method as claimed in claim 1, wherein said temporary substrate is a glass substrate.

Claim 7 (withdrawn): The method as claimed in claim 1, wherein said temporary substrate is bonded to said LED epitaxial structure with epoxy or wax.

Claim 8 (withdrawn): The method as claimed in claim 1, wherein said mirror is a metal capable of forming high bandgap with said LED epitaxial structure.

Claim 9 (withdrawn): The method as claimed in claim 8, wherein said mirror is made from a material selected from the group consisting of Ag, Pt, Pd, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni, In, Sn, Al, Zn, Ge and Ni, or mixtures thereof.

Claim 10 (withdrawn): The method as claimed in claim 1, wherein said mirror is made from a composite of a metal with a low refractivity and an insulating layer with a high refractivity, and said insulating layer is adjacent to said LED epitaxial structure.

Claim 11 (withdrawn): The method as claimed in claim 10, wherein said composite is selected from the group consisting of  $\text{Al}/\text{Al}_2\text{O}_3$ ,

Al/SiO<sub>2</sub>, Al/MgF<sub>2</sub>, Pt/Al<sub>2</sub>O<sub>3</sub>, Pt/SiO<sub>2</sub>, Pt/MgF<sub>2</sub>, Al/Al<sub>2</sub>O<sub>3</sub>, Al/SiO<sub>2</sub>,  
Al/MgF<sub>2</sub>, Au/Al<sub>2</sub>O<sub>3</sub>, Au/SiO<sub>2</sub>, Au/MgF<sub>2</sub>, Ag/Al<sub>2</sub>O<sub>3</sub>, Ag/SiO<sub>2</sub>,  
Ag/MgF<sub>2</sub>.

Claim 12 (withdrawn): The method as claimed in claim 1, wherein said permanent substrate is plated beneath said mirror other than predetermined saw streets.

Claim 13 (currently amended): A light emitting diode having a plated substrate with a mirror, comprising:

an LED epitaxial structure sequentially comprising a second cladding layer, an active layer, a first cladding layer, a window and a metal contact layer, wherein said second cladding layer is partially exposed, wherein said active layer is made from a material selected from the group consisting of (Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>y</sub>In<sub>1-y</sub>P, Ga<sub>x</sub>Al<sub>y</sub>In<sub>1-x-y</sub>N, In<sub>x</sub>Ga<sub>1-x</sub>As, and ZnS<sub>x</sub>Se<sub>1-x</sub>, 0≤x≤1, 0≤y≤1;

a first electrode formed on said metal contact layer;  
a second electrode formed on said exposed second cladding layer;  
a mirror formed beneath said LED epitaxial structure; and  
a permanent metal substrate plated beneath said mirror and retaining sawing streets without plating the substrate thereon;  
wherein said mirror is made from a composite, a metal or an alloy selected from the group consisting of:

Al/MgF<sub>2</sub>, Pt/Al<sub>2</sub>O<sub>3</sub>, Pt/SiO<sub>2</sub>, Pt/MgF<sub>2</sub>, Au/SiO<sub>2</sub>, Au/MgF<sub>2</sub>, Ag/MgF<sub>2</sub>;  
Ag, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni and Zn, or mixtures thereof when said active layer LED epitaxial structure is made from (Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>y</sub>In<sub>1-y</sub>P;

Ag, Pt, Pd, Al, and Ni, or mixtures thereof when said active layer LED epitaxial structure is made from Ga<sub>x</sub>Al<sub>y</sub>In<sub>1-x-y</sub>N, 0≤x≤1, 0≤y≤1;

Ag, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni and Zn, or mixtures thereof when said active layer LED epitaxial structure is made from

$\text{In}_x\text{Ga}_{1-x}\text{As}$ ,  $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ; or  
Ag, Pt, Pd, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni, Al and Ni, or mixtures  
thereof when said active layer ~~LED epitaxial structure~~ is made  
from  $\text{ZnS}_x\text{Se}_{1-x}$ ,  $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ .

Claim 14 (canceled)

Claim 15 (original): The light emitting diode as claimed in claim 13 further comprising a transparent conductive film between said first electrode and said metal contact layer.

Claims 16-25 (canceled)